

Title (en)

MAGNETO-RHEOLOGICAL DAMPING ASSEMBLY

Title (de)

MAGNETORHEOLOGISCHE DÄMPFUNGSANORDNUNG

Title (fr)

ENSEMBLE D'AMORTISSEMENT MAGNÉTO-RHÉOLOGIQUE

Publication

**EP 2710277 A1 20140326 (EN)**

Application

**EP 11865764 A 20110805**

Priority

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- CN 2011078068 W 20110805

Abstract (en)

[origin: WO2012155394A1] A magneto-rheological damping assembly including a piston (28) defining a core (38). A pair of spaced electromagnets (46) are disposed about the core (38) and are connected to a controller (48) for selectively generating a magnetic flux. A pair of permanent magnets (52) are disposed about the electromagnets (46) and a pole segment (54;154;56;156) is disposed therebetween. A main gap (74) extends through the piston (28) through which magneto-rheological fluid (26) is conveyed. Flux generated by the magnets controls the viscosity of the fluid in the main gap (74) to control the damping force of the assembly. The controller (48) defines an off operating state for cancelling the flux from the permanent magnets (52) across the main gap (74). The core (38) and the pole segment (54;154;56;156) define a closed auxiliary gap (80) extending axially between the electromagnets (46) and radially between the core (38) and the internal pole segment (56) for preventing leakage of flux across the main gap (74) when the assembly is in the off operating state.

IPC 8 full level

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